WEST Search History

Hide Items | Restore | Clear | Cancel

DATE: Monday, January 08, 2007

Hide?	Set Name	Query	Hit Count
	DB=USPT; PLUR=YES; OP=ADJ		
☐	L1	6648327.pn.	1
☐	L2	6348327.pn.	1
☐	L3	prorelaxin	213
☐	L4	dibasic cleavage	84
☐	L5	l3 and l4	1
☐	L6	relaxin	701
☐	L7	L3 AND L6	206
☐	L8	KEX2	792
☐	L9	PROHORMONE CONVERTASE	144
☐	L10	L7 AND L8	3
☐	L11	L9 AND L7	2
☐	L12	L10 OR L11	3
	DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI; PLUR=YES; OP=ADJ		
☐	L13	GORMAN.IN.	2579
☐	L14	GROSKREUTZ.IN.	34
☐	L15	L14 AND L13	8
	DB=USPT; PLUR=YES; OP=ADJ		
☐	L16	L8 AND CHO	535
☐	L17	L9 AND CHO	71
☐	L18	KIDNEY AND 293	11032
☐	L19	L18 AND L8	212
☐	L20	L19 AND L9	16
☐	L21	L7 AND CHO	147
☐	L22	L21 AND HEK	9

END OF SEARCH HISTORY

```
> D HIS

     (FILE 'HOME' ENTERED AT 18:23:30 ON 08 JAN 2007)

     FILE 'MEDLINE' ENTERED AT 18:23:48 ON 08 JAN 2007
L1            33 S PREPRORELAXIN
L2             0 S PRERELAXIN
L3            33 S PRORELAXIN

     FILE 'CAPLUS, LIFESCI, SCISEARCH, EMBASE, BIOSIS, MEDLINE' ENTERED AT
     18:29:47 ON 08 JAN 2007
L4           228 S PRORELAXIN
L5           107 DUPLICATE REMOVE L4 (121 DUPLICATES REMOVED)
L6             6 S L4 AND PC1
L7             7 S L4 AND KEX2
L8            13 S L6 OR L7
L9         17386 S PROINSULIN
L10          239 S L9 AND PC1
L11           16 S L10 AND KEX2
L12            0 S L11 AND RELAXIN
L13            0 S L11 AND PRORELAXIN
L14           81 S L9 AND KEX2
L15            0 S L14 AND HEK293
L16        21983 S HEK293
L17            0 S L10 AND HEK293
L18            1 S L10 AND CHO
L19            1 S L14 AND CHO
L20           67 S TETRABASIC CLEAVAGE
L21            0 S L4 AND L20
L22           12 S L20 AND KEX2
L23         8426 S L20 AND PC1 OR PC3
L24        12966 S PC1 OR PC3
L25           12 S L20 AND L24
L26           23 S L22 OR L25
L27          337 S SPC3
L28        12966 S PC1 OR PC3
L29        13206 S L27 OR L28
L30           17 S L29 AND (RELAXIN OR PRORELAXIN)
L31            6 DUPLICATE REMOVE L30 (11 DUPLICATES REMOVED)
L32        10246 S RELAXIN OR PRORELAXIN
L33            8 S L32 AND KEX2
L34            3 DUPLICATE REMOVE L33 (5 DUPLICATES REMOVED)

=>
```

ANSWER 18 OF 33 MEDLINE on STN
AN 93188627 MEDLINE
DN PubMed ID: 8445994
TI Recombinant porcine prorelaxin produced in Chinese hamster ovary cells is biologically active.
AU Vu A L; Green C B; Roby K F; Soares M J; Fei D T; Chen A B; Kwok S C
CS Department of Biochemistry and Molecular Biology, University of Kansas Medical Center, Kansas City 66160.
NC HD24599 (NICHD)
SO Life sciences, (1993) Vol. 52, No. 12, pp. 1055-61.
Journal code: 0375521. ISSN: 0024-3205.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199304
ED Entered STN: 16 Apr 1993
Last Updated on STN: 3 Feb 1997
Entered Medline: 2 Apr 1993
AB Although prorelaxin has a similar structure as proinsulin, the posttranslational processing of prorelaxin seems to be quite different from that of proinsulin. There are no pairs of basic residues flanking the relaxin moiety in most prorelaxins studied so far. Instead, the prorelaxins of many species contains a tetrabasic sequence (Arg-Lys-Lys-Arg) between the connecting peptide and the A-chain. This is the recognition sequence of furin. In order to study this possible processing by furin, we express the recombinant porcine prorelaxin in Chinese hamster ovary cells. The expected 19 kDa recombinant porcine prorelaxin was found to be constitutively secreted into the medium at a level of approximately 250 ng/ml. No conversion of the 19 kDa prorelaxin into the 6 kDa relaxin was observed. Unlike most prohormones which are biologically inactive, the recombinant prorelaxin was found to be biologically active in an in vitro bioassay.

L3 ANSWER 19 OF 33 MEDLINE on STN
AN 93062911 MEDLINE
DN PubMed ID: 1435788
TI Prohormone convertase-1 will process prorelaxin, a member of the insulin family of hormones.
AU Marriott D; Gillece-Castro B; Gorman C M
CS Department of Cell Genetics, Genentech, Inc, South San Francisco, California 94080.
SO Molecular endocrinology (Baltimore, Md.), (1992 Sep) Vol. 6, No. 9, pp. 1441-50.
Journal code: 8801431. ISSN: 0888-8809.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199212
ED Entered STN: 22 Jan 1993
Last Updated on STN: 3 Mar 2000
Entered Medline: 21 Dec 1992
AB Relaxin is a polypeptide hormone involved in remodeling of the birth canal during parturition. It is synthesized as a preprohormone precursor, which undergoes specific processing to form the mature two-chain disulfide-linked active species that is secreted by the cell. A major part of this processing requires endoproteolytic cleavage at specific pairs of basic amino acid residues, an event necessary for the maturation of a variety of important biologically active proteins, such as insulin and nerve growth factor. Human type 2 preprorelaxin was coexpressed in human kidney 293 cells with the candidate prohormone convertase-processing enzymes mPC1 or mPC2, both cloned from the mouse pituitary tumor AtT-20

obvious to try

no reasonable expectation of success

cell line, or with the yeast kex2 alpha-mating factor-converting enzyme from Saccharomyces cerevisiae. Prorelaxin expressed alone in 293 cells was secreted into the culture medium unprocessed. Transient coexpression with mPC1 or kex2, but not with mPC2, resulted in the secretion of a low mol wt species with an electrophoretic mobility very similar, if not identical, to that of authentic mature relaxin purified from human placenta. This species was precipitable by monoclonal antibodies specific for relaxin and had a retention time on reverse phase HPLC comparable to that of relaxin. Its analysis by both electrospray and fast atom bombardment mass spectrometry generated mass data that were consistent only with mature relaxin. The basic residues required for mPC1-dependent cleavage of prorelaxin are defined by site-directed mutagenesis.

=>

ANSWER 85 OF 107 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1990:30735 CAPLUS

DN 112:30735

TI Prohormonal cleavage sites are associated with Ω loops

AU Bek, Eugene; Berry, Robert

CS Sch. Med., Northwestern Univ., Chicago, IL, 60611, USA

SO Biochemistry (1990), 29(1), 178-83
CODEN: BICHAW; ISSN: 0006-2960

DT Journal

LA English

AB Secretory peptides are generated from larger precursor proteins, or prohormones, by proteolytic cleavage at sites consisting of one or more basic amino acids. The association of these cleavage sites with the various classes of secondary structure in the prohormones was investigated. In particular the association of cleavage sites with the newly defined category of Ω loops was determined An algorithm for predicting the occurrence of such loops from the primary structure of the precursor was developed and this procedure was validated by comparison to crystallog. data. When this method was applied to prohormones, about one-third of the cleavage sites previously assigned to reverse turns were actually associated with Ω loops. Moreover, sites that delimit secreted peptides are most often associated with loops and are concentrated in the neck regions of the loops. These data are interpreted in terms of a model in which the processing endoprotease interacts with two sites on the prohormone: a recognition site in the middle of a loop and the cleavage site at its neck.

ANSWER 82 OF 107 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN

AN 1992:88474 BIOSIS

DN PREV199242040749; BR42:40749

TI CORRECT PROCESSING OF HUMAN PRORELAXIN BY A MAMMALIAN PROHORMONE CONVERTASE MPC1 AND BY THE YEAST KEX2 GENE PRODUCT IN HUMAN KIDNEY 293 CELLS.

AU MARRIOTT D [Reprint author]; GORMAN C M

CS DEP CELL GENET, GENENTECH INC, 460 PT SAN BRUNO BLVD, SO SAN FRANCISCO, CALIF 94080, USA

SO Journal of Cell Biology, (1991) Vol. 115, No. 3 PART 2, pp. 391A. Meeting Info.: ABSTRACTS OF PAPERS PRESENTED AT THE THIRTY-FIRST ANNUAL MEETING OF THE AMERICAN SOCIETY FOR CELL BIOLOGY, BOSTON, MASSACHUSETTS, USA, DECEMBER 8-12, 1991. J CELL BIOL.
CODEN: JCLBA3. ISSN: 0021-9525.

DT Conference; (Meeting)

FS BR

LA ENGLISH

ED Entered STN: 4 Feb 1992
Last Updated on STN: 13 Mar 1992

=>

5,320,953 Hudson

L5 ANSWER 90 OF 107 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1988:449635 CAPLUS
DN 109:49635
TI Human prorelaxin, its recombinant preparation and therapeutic use
IN Gorman, Cornelia Maxine; Ross, Michael Jay; Niall, Hugh David
PA Florey, Howard, Institute of Experimental Physiology and Medicine, Australia; Genentech, Inc.
SO Eur. Pat. Appl., 57 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 260149	A1	19880316	EP 1987-308062	19870911
	R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	AU 8778314	A	19880317	AU 1987-78314	19870911
	AU 612594	B2	19910718		
	JP 63152399	A	19880624	JP 1987-229428	19870912
PRAI	US 1986-907197	A	19860912		

AB The first successful recombinant expression of the cDNA for human prorelaxin (I) is reported. I is useful for effecting parturition and treating connective tissue disorders (no data). The expression vector pCIHRX contained H2 I cDNA under the control of the cytomegalovirus enhancer, promoter, and splice donor site; the Ig variable region splice acceptor site; and the hepatitis surface antigen polyadenylation site. I was purified from the transformed CHO cell culture; the biol. activity of I was tested using the murine pubic symphysis assay.

ANSWER 91 OF 107 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1988:401857 CAPLUS
DN 109:1857
TI Construction and use of plasmids for continuous heterologous protein manufacture in eukaryotic cells
IN Gorman, Cornelia Maxine
PA Genentech, Inc., USA
SO Eur. Pat. Appl., 48 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 260148	A2	19880316	EP 1987-308060	19870911
	EP 260148	A3	19890607		
	R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	DK 8704739	A	19880313	DK 1987-4739	19870911
	DK 175363	B1	20040913		
	FR 2603899	A1	19880318	FR 1987-12633	19870911
	FR 2603899	B1	19900713		
	GB 2197321	A	19880518	GB 1987-21424	19870911
	GB 2197321	B	19901003		
	AU 8778317	A	19880519	AU 1987-78317	19870911
	AU 613316	B2	19910801		
	DE 3730599	A1	19880707	DE 1987-3730599	19870911
	JP 63152986	A	19880625	JP 1987-229429	19870912
	JP 2888518	B2	19990510		
	JP 09103296	A	19970422	JP 1996-118837	19870912
	JP 2000308497	A	20001107	JP 2000-115248	19870912
PRAI	US 1986-907185	A	19860912		
	US 1987-71674	A	19870709		
	JP 1987-229429	A3	19870912		
	JP 1996-118837	A3	19870912		

AB Plasmids which allow continuous stable expression of heterologous protein genes in eukaryotic cells contain a stabilizing sequence comprising a splice donor-intron-acceptor sequence between the promoter and the gene. Plasmid pF8CIS, containing in 5' to 3' order a cytomegalovirus enhancer and promoter, a cytomegalovirus splice donor site and a portion of an intron, the Ig variable region intron and splice acceptor site, the Factor VIII-encoding cDNA, and the SV50 polyadenylation site, was constructed. Cotransfection of TM4 cells with this plasmid and a neomycin gene-containing plasmid, followed by amplification of the Factor VIII sequence, resulted in transformed cells which produced 3.0 milliunits Factor VIII/104 cells/day.

=>